

The Commonwealth of Massachusetts  
Executive Office of Health and Human Services  
Department of Public Health  
William A. Hinton State Laboratory Institute  
305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK  
GOVERNOR

TIMOTHY P. MURRAY  
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD  
SECRETARY

JOHN AUERBACH  
COMMISSIONER

11/07/2011

Keith McCray  
Assistant District Attorney, Norfolk County

Dear ADA McCray,

Enclosed is the information you requested in regards to Commonwealth vs. [REDACTED]  
Included are copies of the following:

1. Curriculum Vitae for Annie Dookhan.
2. Drug Analysis Laboratory Receipt.
3. Control Cards with analytical results for samples # [REDACTED]
4. Analysis sheets with custodial chemist's hand notations and test results.
5. GC/Mass Spectral analytical data for samples # [REDACTED]

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Kate Corbett analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

A handwritten signature in black ink, appearing to read "Annie Dookhan".

Annie Dookhan  
Chemist II  
Drug Analysis Lab  
Jamaica Plain, MA. 02130  
(617) 983-6622

## Curriculum Vitae

**Annie Khan (Dookhan)**

### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

### Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

\*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.

\*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.

\*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.

\*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.

\*Maintenance and repairs of all analytical instruments.

\*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.

\*Oversee the Quality Control/Quality Assurance program for the Drug Lab.

\*Writing, revising and reviewing Standard Operating Procedures (SOPs) and Protocols.

\*Notary Public.

\*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 – 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

\*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.

\*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.

\*Writing, revising and reviewing Standard Operating Procedures (SOPs).

\*Trained and supervised new chemists and interns for the department.

\*Routine QC testing of products for the FDA.

\*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.

\*Calibration, preventive maintenance, QC and QA of analytical instrumentation.

\*Complete testing of chemicals for Vendor Validation Project for the FDA.

\*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

### Additional Training:

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP training with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS trainings with Agilent Technologies and Restek.

HPLC and LC/MS/MS trainings with Waters Cooperation.

FTIR training with Spectros.

TOC training with MBL and Sievers.

### Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

*The Commonwealth of Massachusetts*

*Executive Office of Health and Human Services*

*Department of Public Health*

*State Laboratory Institute*

Boston Drug Laboratory

Tel (617) 983-6622

Fax (617) 983-6625

Amherst Drug Laboratory

Tel (413) 545-2601

Fax (413) 545-2608

Boston Hours

8:00 – 11:00

2:00 – 4:00

Amherst Hours

9:00 – 12:00

1:00 – 3:00

**DRUG RECEIPT**

City or Department: RANDOLPH Police Dept Police Reference No.: [REDACTED]

Name and Rank of Submitting Officer: Detreevil Paul Smyth

Defendant(s) Name (last, first, initial):

[REDACTED]

*To be completed by Submitter*

Description of Items Submitted

*To be completed by Lab Personnel*

Gross Weight

Lab Number

3 Seperate packages of a brownish powdery  
substance wrapped in clear plastic

53.84 gm

[REDACTED]

Received by: [Signature]

Date: 12-20-10

No. [REDACTED]  
City: Randolph Police Dept.  
Officer: Detective PAUL SMYTH  
Def: [REDACTED]

Date Analyzed: 12/29/10

Amount:

Subst: SUB

No. Cont: 3 Cont: pb

Date Rec'd: 12/20/2010

No. Analyzed:

Gross Wt.: 53.84

Net Weight: 47.18

# Tests: 12 ASD

Prelim: Heroin

Findings:

QAC  
Heroin

# DRUG POWDER ANALYSIS FORM

SAMPLE #                      AGENCY Randolph ANALYST ASJ

No. of samples tested:            Evidence Wt.           

## PHYSICAL DESCRIPTION:

Beige powdered substance  
in 3 pps

Gross Wt ( 3 ): 49.9690

Gross Wt ( ):           

Pkg. Wt:           

Net Wt:           

->

## PRELIMINARY TESTS

### Spot Tests

3 Cobalt Thiocyanate (+)  
3 Marquis +  
3 Froehde's +  
3 Mecke's +

### Microcrystalline Tests

Gold Chloride             
TLTA ( )           

### OTHER TESTS

## PRELIMINARY TEST RESULTS

RESULTS Heroin

DATE 12-24-10

## GC/MS CONFIRMATORY TEST

RESULTS Heroin

MS OPERATOR KAC

DATE 12-29-10

Sample #: [REDACTED]

# samples tested: 3

#	Gross Weight	Packet Weight	Net Weight	#	Gross Weight	Packet Weight	Net Weight
1	416.8816	1.3813	45.5003	26			
2	2.7051	1.3033	1.4018	27			
3	0.3831	0.0960	0.2871	28	double bagged		
4				29			
5				30			
6				31			
7				32			
8				33			
9				34			
10				35			
11				36			
12				37			
13				38			
14				39			
15				40			
16				41			
17				42			
18				43			
19				44			
20				45			
21				46			
22				47			
23				48			
24				49			
25				50			

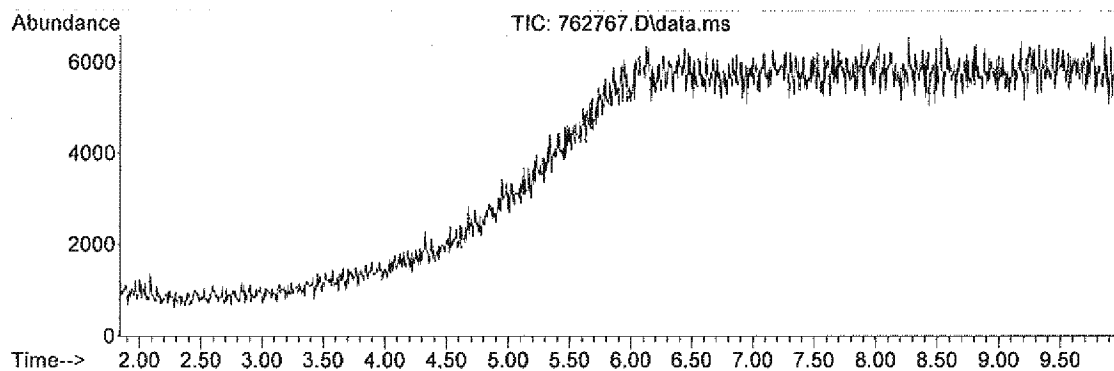
Calculations:

$$\text{Net wt} = 47.1892$$

✓KAC  
11/7/11

## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762767.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 17:53  
Sample Name : BLANK  
Submitted by : ASD  
Vial Number : 2  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

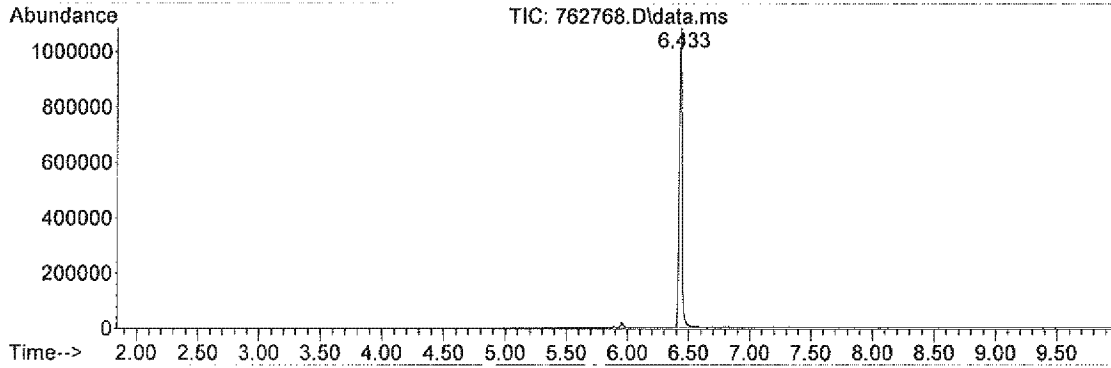


Ret. Time	Area	Area %	Ratio %
-----------	------	--------	---------

\*\*\*NO INTEGRATED PEAKS\*\*\*

## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762768.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 18:06  
Sample Name : HEROIN STD  
Submitted by : ASD  
Vial Number : 68  
AcquisitionMeth: DRUGS.M  
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.433	1603588	100.00	100.00

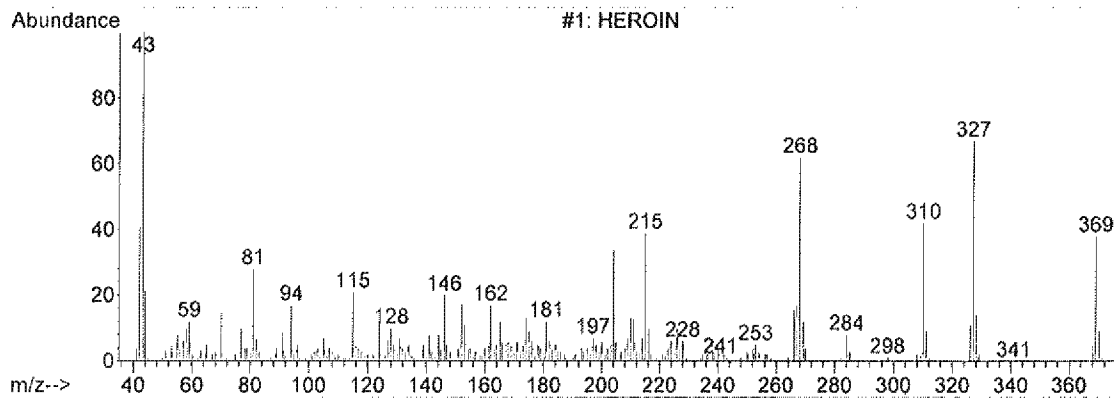
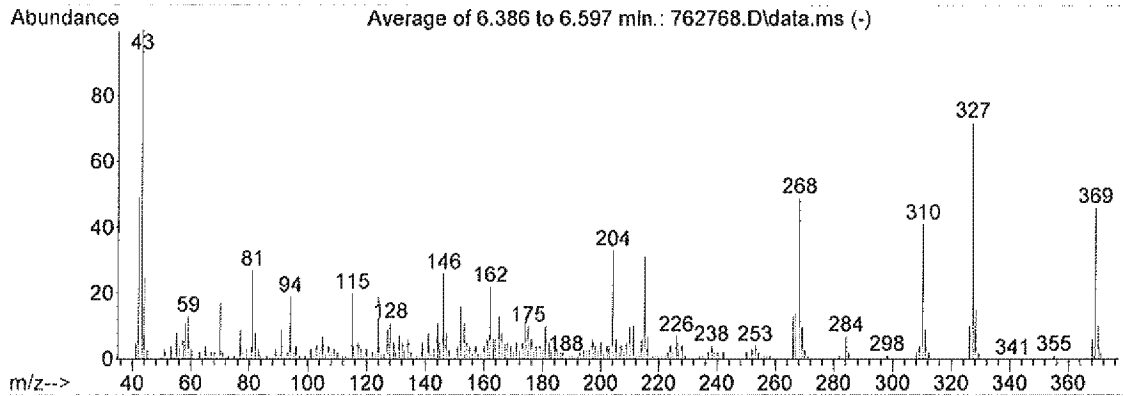


## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762768.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 18:06  
Sample Name : HEROIN STD  
Submitted by : ASD  
Vial Number : 68  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

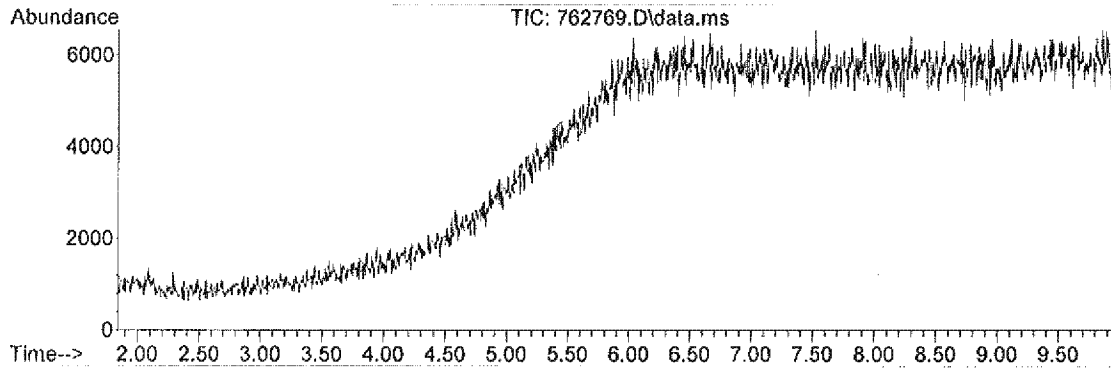
Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	6.43	C:\Database\SLI.L HEROIN	000561-27-3	99



## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762769.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 18:18  
Sample Name : BLANK  
Submitted by : ASD  
Vial Number : 2  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

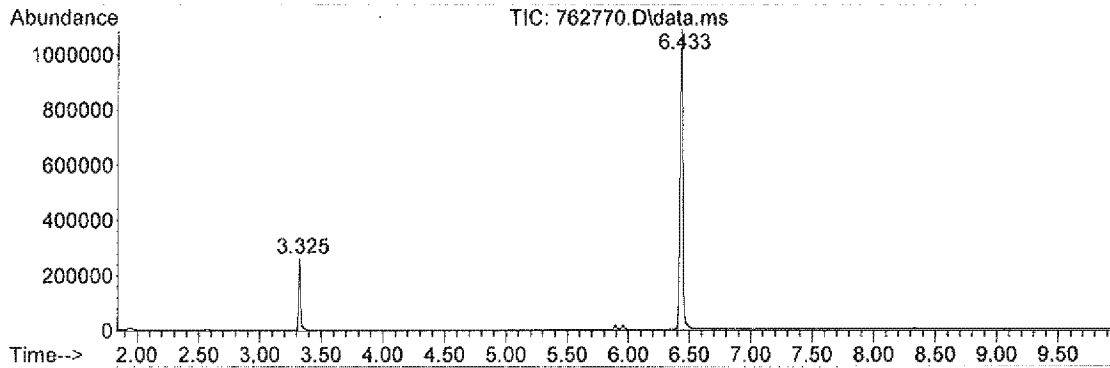


Ret. Time	Area	Area %	Ratio %
-----------	------	--------	---------

\*\*\*NO INTEGRATED PEAKS\*\*\*

## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762770.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 18:31  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 70  
AcquisitionMeth: DRUGS.M  
Integrator : RTE



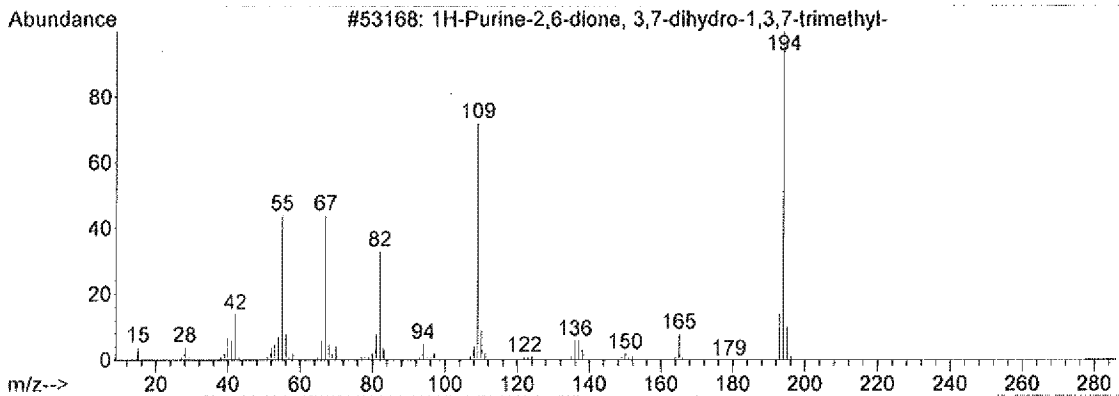
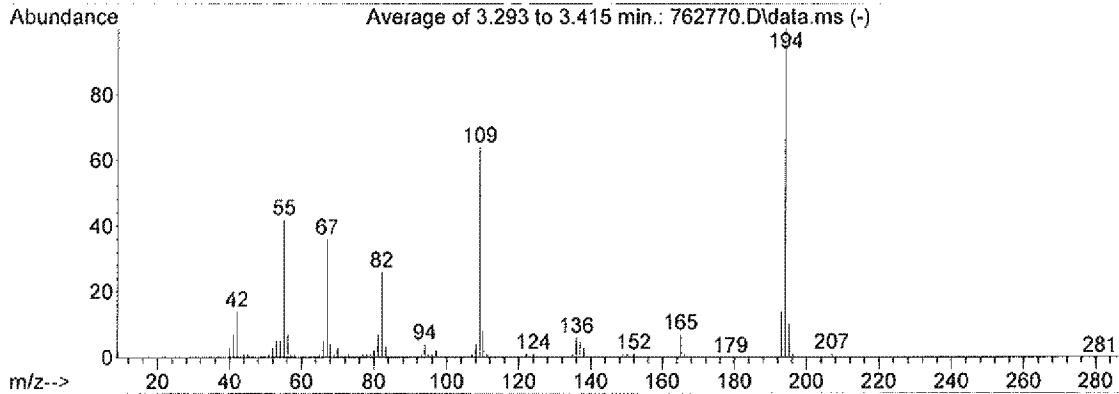
Ret. Time	Area	Area %	Ratio %
3.325	312467	16.24	19.39
6.433	1611856	83.76	100.00

## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762770.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 18:31  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 70  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	3.32	C:\Database\NIST05a.L		
		1H-Purine-2,6-dione, 3,7-dihydro-1,	000058-08-2	98
		1H-Purine-2,6-dione, 3,7-dihydro-1,	000058-08-2	98
		1H-Purine-2,6-dione, 3,7-dihydro-1,	000058-08-2	96

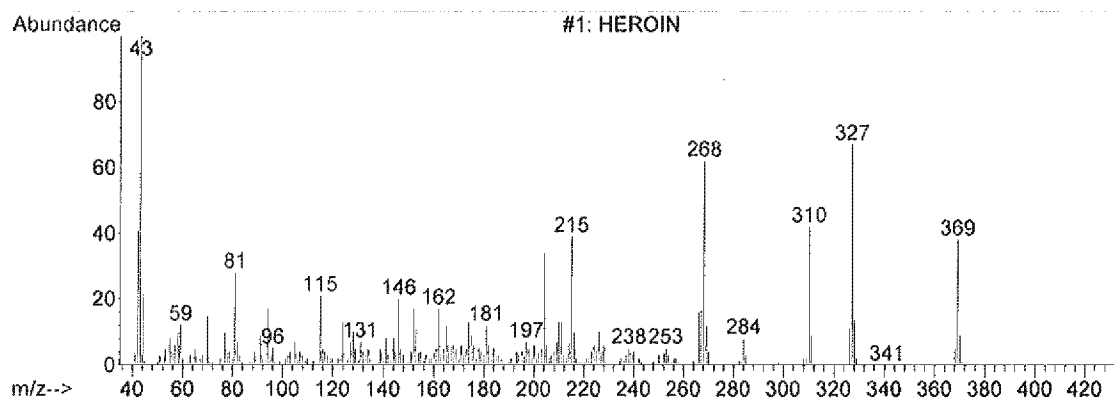
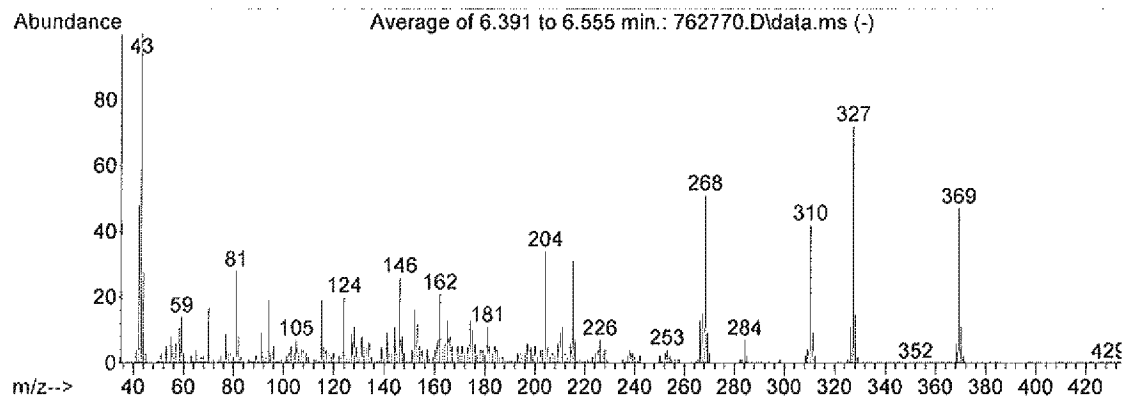


## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762770.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 18:31  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 70  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

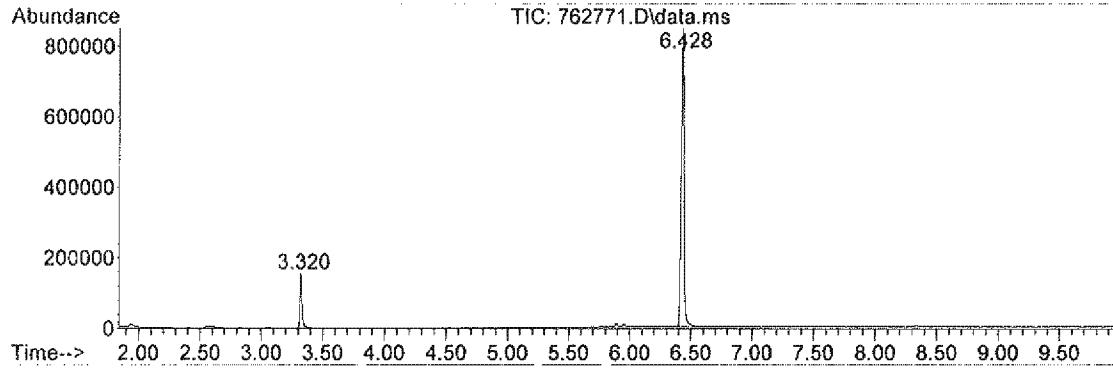
Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
2	6.43	C:\Database\SLI.L HEROIN	000561-27-3	99



## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762771.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 18:43  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 71  
AcquisitionMeth: DRUGS.M  
Integrator : RTE



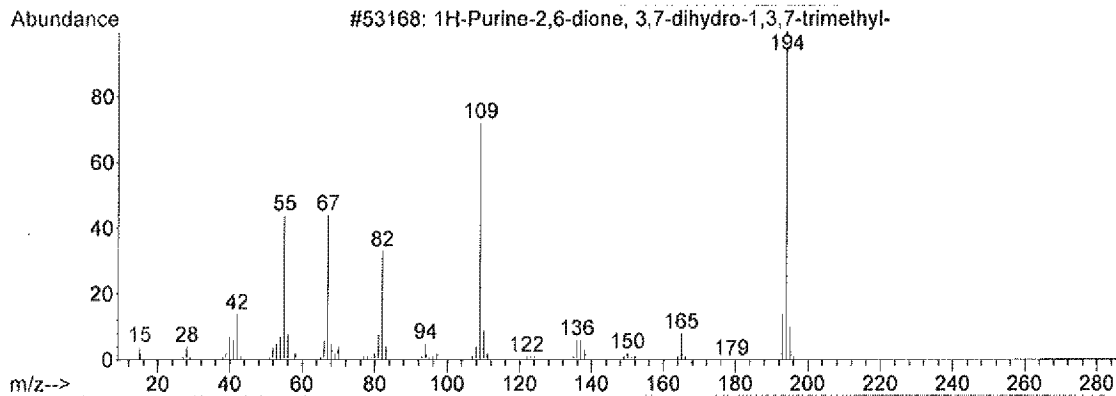
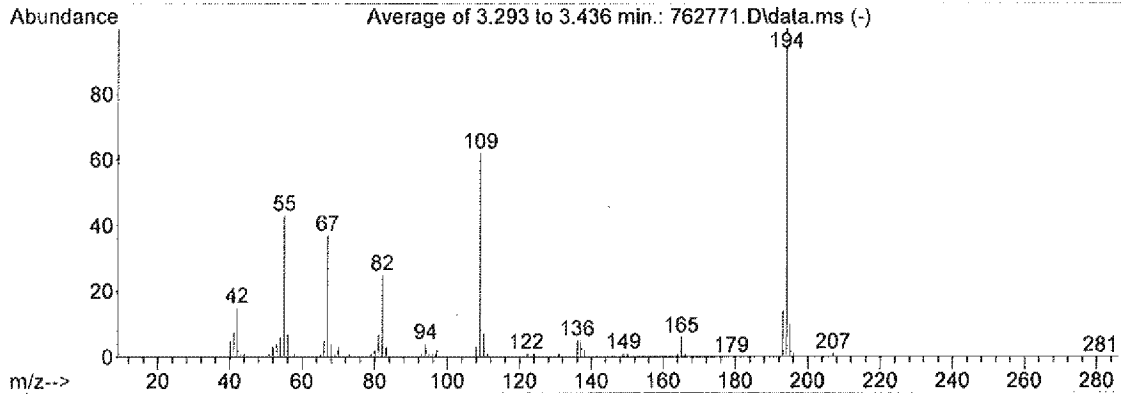
Ret. Time	Area	Area %	Ratio %
3.320	189258	13.41	15.49
6.428	1221895	86.59	100.00

## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762771.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 18:43  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 71  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	3.32	C:\Database\NIST05a.L		
		1H-Purine-2,6-dione, 3,7-dihydro-1,	000058-08-2	97
		1H-Purine-2,6-dione, 3,7-dihydro-1,	000058-08-2	97
		1H-Purine-2,6-dione, 3,7-dihydro-1,	000058-08-2	97

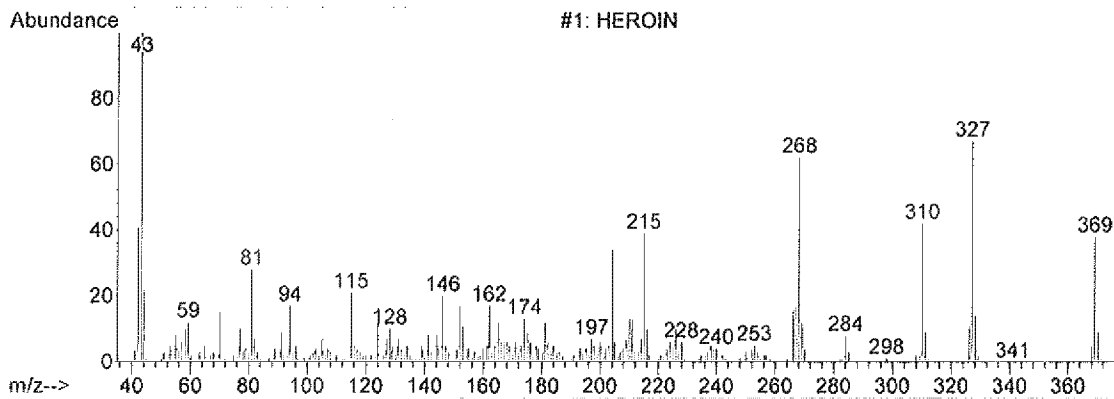
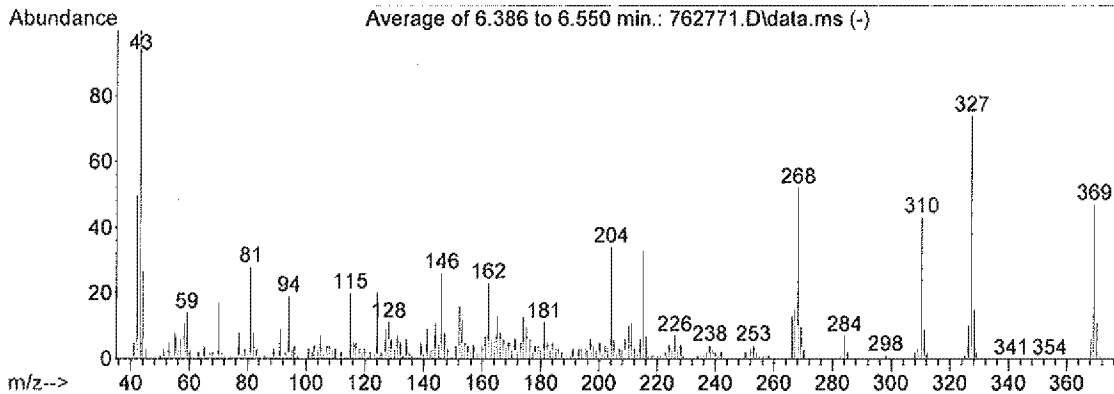


## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762771.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 18:43  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 71  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

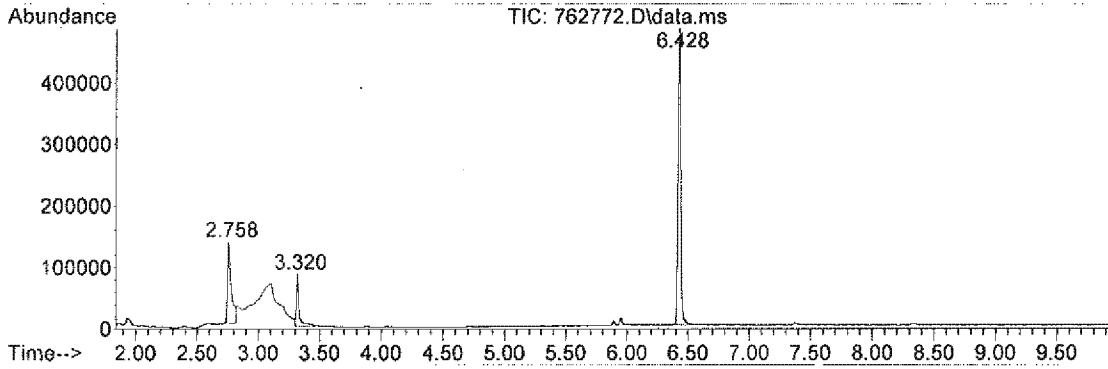
PK#	RT	Library/ID	CAS#	Qual
2	6.43	C:\Database\SLI.L HEROIN	000561-27-3	99





Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762772.D  
 Operator : ASD/KAC  
 Date Acquired : 28 Dec 2010 18:56  
 Sample Name : XXXXXXXXXX  
 Submitted by : ASD  
 Vial Number : 72  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
2.758	275738	25.19	39.93
3.320	128104	11.70	18.55
6.428	690607	63.10	100.00

Information from Data File:

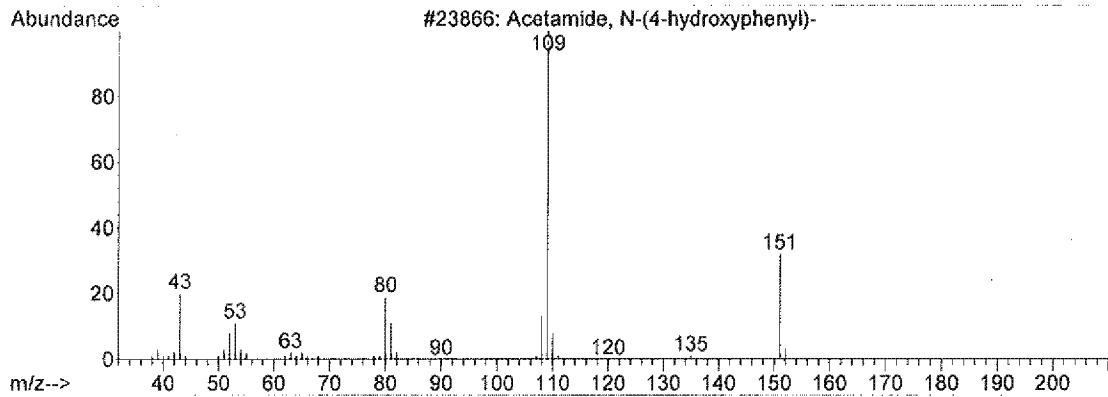
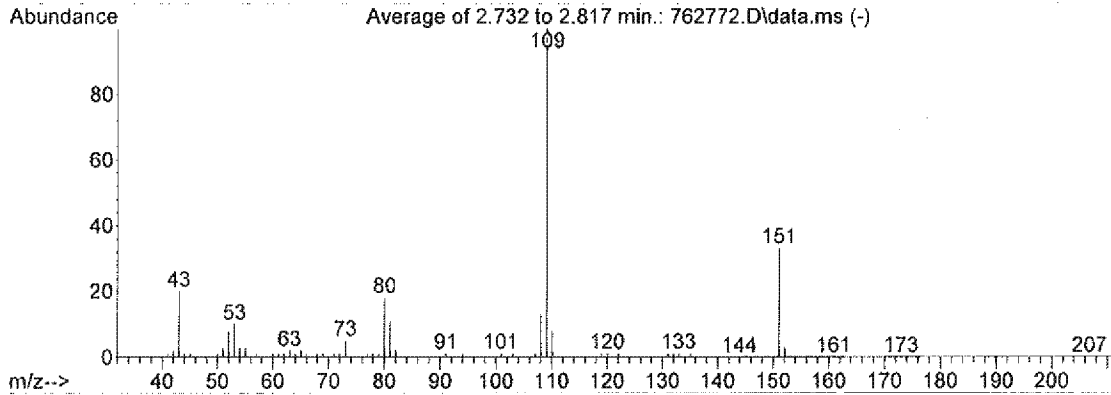
```

File Name       : F:\Q4-2010\SYSTEM7\12_24_10\762772.D
Operator        : ASD/KAC
Date Acquired   : 28 Dec 2010  18:56
Sample Name     : ██████████
Submitted by    : ASD
Vial Number     : 72
AcquisitionMeth : DRUGS.M
Integrator      : RTE
    
```

```

Search Libraries: C:\Database\SLI.L           Minimum Quality: 80
                  C:\Database\NIST05a.L       Minimum Quality: 80
                  C:\Database\PMW_TOX2.L
    
```

PK#	RT	Library/ID	CAS#	Qual
1	2.76	C:\Database\NIST05a.L		
		Acetamide, N-(4-hydroxyphenyl)-	000103-90-2	97
		Acetamide, N-(4-hydroxyphenyl)-	000103-90-2	95
		Acetamide, N-(4-hydroxyphenyl)-	000103-90-2	94



Information from Data File:

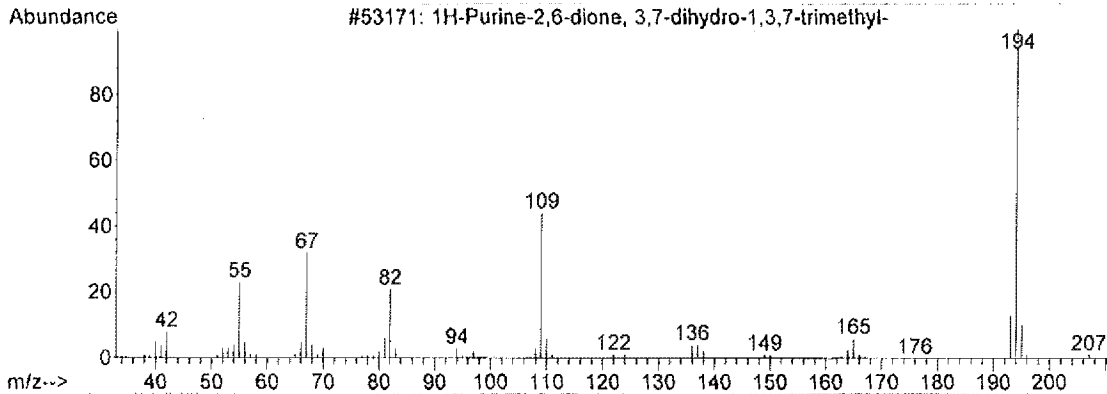
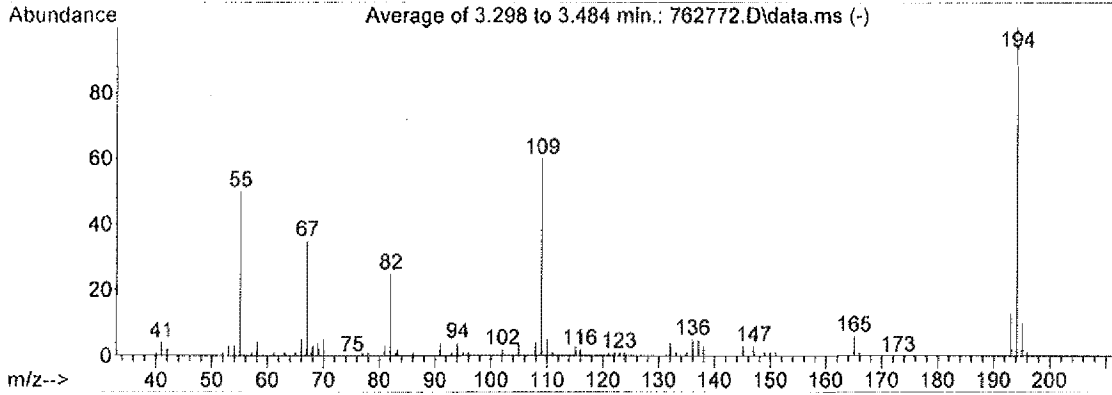
```

File Name       : F:\Q4-2010\SYSTEM7\12_24_10\762772.D
Operator        : ASD/KAC
Date Acquired   : 28 Dec 2010  18:56
Sample Name     : ██████████
Submitted by    : ASD
Vial Number     : 72
AcquisitionMeth : DRUGS.M
Integrator      : RTE
    
```

```

Search Libraries: C:\Database\SLI.L           Minimum Quality: 80
                  C:\Database\NIST05a.L       Minimum Quality: 80
                  C:\Database\PMW_TOX2.L
    
```

PK#	RT	Library/ID	CAS#	Qual
2	3.32	C:\Database\NIST05a.L		
		1H-Purine-2,6-dione, 3,7-dihydro-1,	000058-08-2	97
		1H-Purine-2,6-dione, 3,7-dihydro-1,	000058-08-2	95
		1H-Purine-2,6-dione, 3,7-dihydro-1,	000058-08-2	94

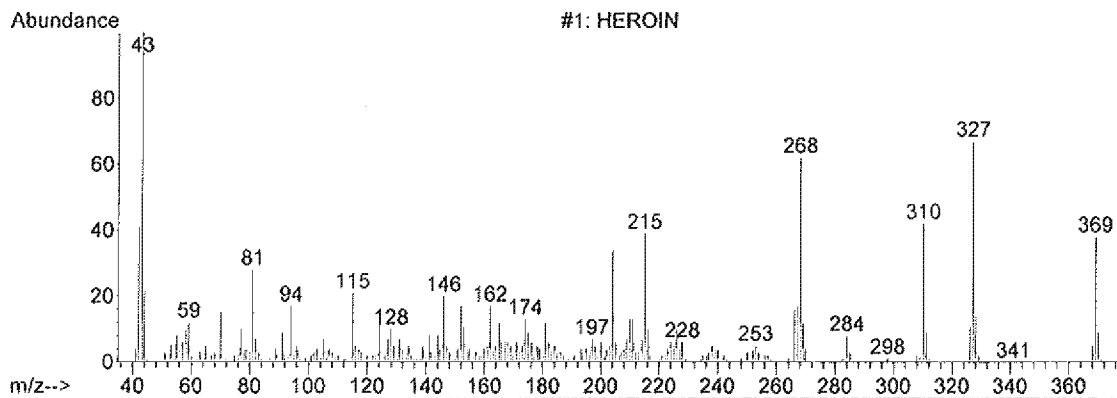
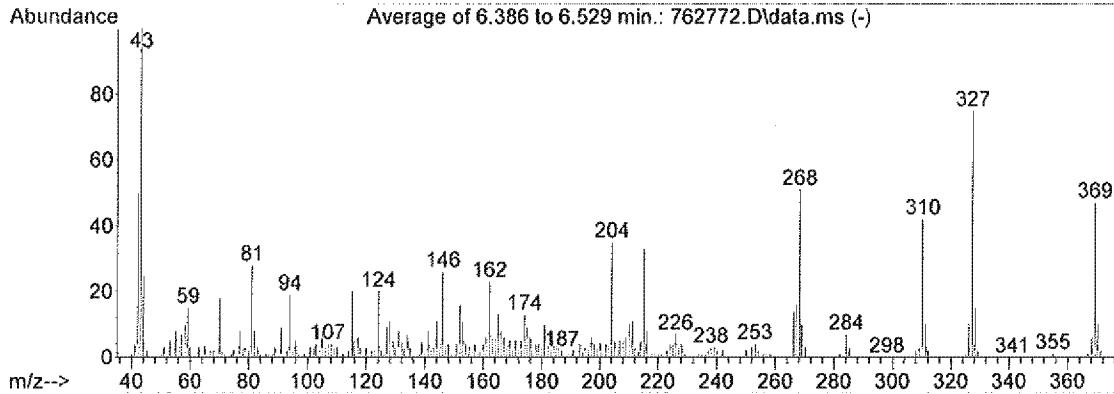


## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762772.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 18:56  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 72  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

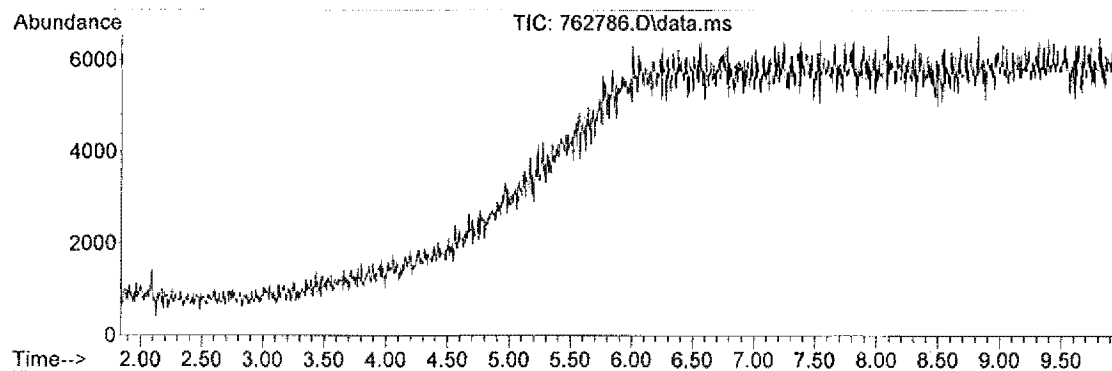
Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
3	6.43	C:\Database\SLI.L HEROIN	000561-27-3	99



## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762786.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 21:52  
Sample Name : BLANK  
Submitted by : ASD  
Vial Number : 2  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

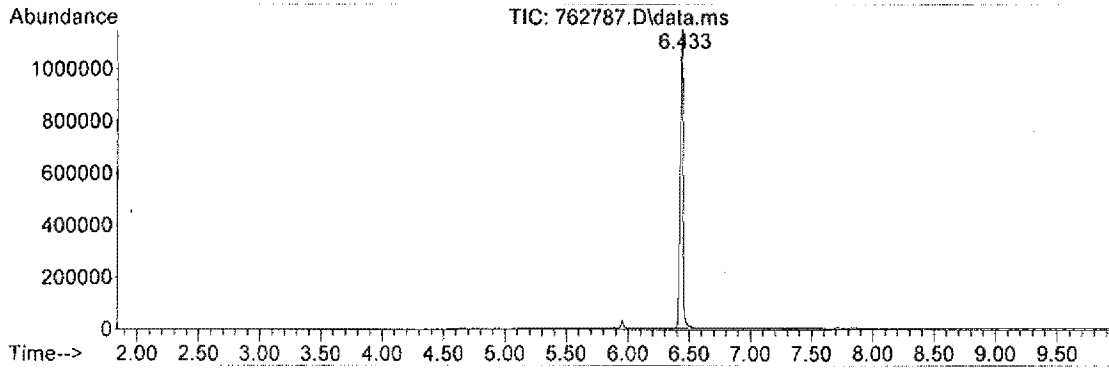


Ret. Time	Area	Area %	Ratio %
-----------	------	--------	---------

\*\*\*NO INTEGRATED PEAKS\*\*\*

## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762787.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 22:05  
Sample Name : HEROIN STD  
Submitted by : ASD  
Vial Number : 68  
AcquisitionMeth: DRUGS.M  
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
6.433	1707520	100.00	100.00

## Information from Data File:

File Name : F:\Q4-2010\SYSTEM7\12\_24\_10\762787.D  
Operator : ASD/KAC  
Date Acquired : 28 Dec 2010 22:05  
Sample Name : HEROIN STD  
Submitted by : ASD  
Vial Number : 68  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	6.43	C:\Database\SLI.L HEROIN	000561-27-3	99

